HAWAII

Addressing the Challenges and Opportunities of Climate Variability and Change for Pacific Island Communities—2002, 2003

Funding for this project helps provide coastal managers, other governmental officials, businesses, and community leaders in U.S.-affiliated Pacific Islands with access to the most recent scientific information on the consequences of climate variability and change. In addition, this project will support the dialogue necessary to more fully understand local vulnerability and develop effective adaptive strategies. This project was funded with a Pacific Islands special project grant from the Center.

Community-Based Habitat Restoration—2001 to 2003

NOAA's community-based restoration program helps community groups restore marine and estuarine habitat by providing funds and technical expertise. NOAA Fisheries leads the program. The Center has been a program partner since fiscal year 2001 and has co-funded several projects, including the restoration and monitoring of Limahuli stream and marine habitats.

Coral Reef Mapping Workshop—1999

The Center provided the NOAA National Environmental Satellite, Data, and Information Service with support for a workshop that reviewed ways in which remote sensing from satellites, spacecraft, and aircraft can facilitate the mapping and monitoring of coral reefs. Particular attention was paid to the potential use of the technology to investigate the global problem of coral mortality (bleaching) associated with El Niño, and the implications for millions of people dependent on coral reefs for food and livelihood. The workshop proceedings are being used to advise governments and nongovernmental organizations of future needs, opportunities, and the implications of the use of the technology to monitor the health of coral reefs.

Developing Risk and Vulnerability Assessments & Hazards Mitigation Strategies—2002 to 2003

Funding for this project will educate decision makers and stakeholders about multihazard mitigation strategies and the development of effective risk and vulnerability assessments. Educational workshops for the islands of Oahu and Hawaii will provide information on developing risk and vulnerability assessments and applying assessment data to the development of a multihazard mitigation strategy. This project is funded with a Pacific Islands special project grant from the Center.

Developing Safer Communities in Maui County, Hawaii—2000

The goal of this project was to develop a prototype hazard mitigation strategy for Maui County, Hawaii, that includes a comprehensive community-wide vulnerability assessment. The Center hired a hazard mitigation specialist from the Rhode Island Emergency Management Agency, under an Intergovernmental Personnel Act agreement, to perform this work. The specialist assisted Maui County in preparing to implement multihazard mitigation measures to help reduce the costly impacts associated with natural disaster events. Outreach efforts highlighting the process and resulting products serve as community models for the Federal Emergency Management Agency's Project Impact Initiative, as well as for the Pacific region as a whole.

Hawaiian Shoreline Variability This Century: A Demonstration of Data Capacity Building—2000, 2001

This project established a high-quality, high-density database of shoreline change histories to improve management efforts. The database is utilized by regional coastal managers to make informed, factually based land-use decisions and is available to the commercial sector through state and county geographic information system (GIS) service agencies. Additionally, the project worked to improve the understanding of why shoreline change happens, where future changes are likely to have societal impact, and how past and present coastal land use may be related to ongoing shoreline change. This project was conducted by the University of Hawaii and funded with a Pacific Islands special project grant from the Center.

Information Exchange through Partnerships—2002, 2003
The Center is leading the effort to implement the NOAA Ocean Service Pacific Services Center (PSC) in Honolulu, Hawaii. PSC is the focal point for the deployment of resources, products, and services from NOS to the Pacific Island region. The new center works in partnership with NOAA, as well as with other federal, state, academic, private sector, and local coastal resource programs, to establish a collaborative program that addresses identified coastal and ocean information needs of island states and territories. PSC works with these partners to determine the best way to implement this collaborative effort and fund special projects that will accelerate the process.

Main Eight Hawaiian Islands Land Cover Data—2002
This project mapped terrestrial land cover in coastal watershed environments. The project relied on satellite multispectral imagery as the primary information source. These data were used to distinguish major land cover classes. For this project, the data were acquired according to the Center's Coastal Change Analysis Program (C-CAP) methods.

Maui County, Hawaii, Hazards Training—2000
The Center conducted a two-day hazard mitigation training workshop in Maui County, Hawaii. The purpose of the workshop was to help build local capacity for developing a regional coastal hazard mitigation plan. Training sessions addressed risk and vulnerability assessments, mitigation planning, mitigation funding opportunities, developing public-private partnerships, and community education and awareness.

Needs Assessment for Island Coastal Programs—2001
The Center is committed to conducting needs assessments of each island coastal program. The goal of the needs assessment is to collect information about the position of the coastal management program, in terms of its technical and nontechnical resources, to meet its goals. The assessment will initiate the development of appropriate and feasible projects between the Center and the particular island coastal program.

Pacific Islands GIS—2001 to 2003
The Pacific Islands GIS project is developing fully-integrated geographic information systems (GIS), spatial data management, and Internet capabilities within the Pacific Islands coastal programs. The project concentrates on data and structures necessary to support the Coastal Zone Management Act (CZMA) and the organizations charged with carrying out CZMA. This project is assisting in functions such as coordinating GIS hardware and software purchases, providing GIS and metadata training, developing spatial data layers and associated metadata, creating and maintaining a Web site with an interactive GIS application, maintaining a list server, and providing technical support to the islands.

Pacific Islands Special Projects Program—2002, 2003
Special Projects is a general program that provides services, such as technical assistance and funding, as defined by island needs. The goal of the program is to provide assistance to the Pacific Island coastal management community on a very broad range of issues related to coastal management. Through the Center's Broad Area Announcement, applicants can compete for project funding to meet their needs.

Pacific Islands Technical Assistantship Program—2002, 2003
To accommodate a need expressed by Pacific Island coastal managers, the Center has designed a specialized technical assistantship program. One of the barriers to coastal management in the Pacific is that technically trained staff, especially those with geographic information system (GIS) experience, cannot be recruited or retained. The goal of the program is to place technically trained students with Pacific Island coastal programs for two years to work on coastal management activities.

Pacific Services Center—2001 to 2003
www.csc.noaa.gov/psc/index.html
The beginnings of a NOAA Ocean Service (NOS) Pacific Services Center, located in Hawaii, took place in 2001. The office, which is directed by a small core staff from NOS, works to bring more NOS services to the Pacific Islands. One of the concerns this office works with islanders to address is the myriad of issues surrounding the increasing cruise and commerce shipping industry.

Protected Areas GIS (PAGIS)
www.csc.noaa.gov/pagis/
The PAGIS project brought compatible geographic information systems (GIS), geographic data management, and Internet capabilities to each of the nation's 25 Estuarine Research Reserves and 13 Marine Sanctuaries. Through PAGIS, the reserves and sanctuaries also developed advanced data sets, underwent extensive training, and found innovative ways to make the most effective use of their new data and technological capabilities.

Risk and Vulnerability Assessment Module, Maui—2000
This module builds upon the methodology developed by the Center in the *Community Vulnerability Assessment Tool* CD-ROM. The framework for a generic Risk and Vulnerability Assessment Module (RVAM) was developed to operate within various models of urban growth developed by Prescott College and NASA. RVAM functions as a planning tool to assist local decision makers in assessing a community's social, environmental, and economic vulnerability to natural disasters, and allows planners to test a variety of policy alternatives to improve the resilience of a community to these hazards. The Center and the Prescott College/NASA partnership utilized growth and hazard scenarios for Maui County, Hawaii, to develop the RVAM.

Safe Navigation—2002, 2003
The Pacific Services Center, along with the NOAA Coastal Services Center, is working to assist the Pacific Island region on maritime and shipping issues of critical importance. These issues include increased vessel traffic, out-of-date nearshore data and information, the need for updated nautical charts, environmental implications from groundings, and the accuracy of geospatial positioning for the islands and their coastal environments.

Wai'anae Ecological Characterization—2002, 2003
The Wai'anae Ecological Characterization project is developing information, data, and GIS-based tools for examining the effects of land use on coral communities and other living resources. A specific focus of the characterization is the effect of land use on sediment erodibility and discharges into coastal waters. The products of the characterization will be a CD-ROM, paper maps, and a Web site. The project is led by the Hawaii Coastal Zone Management Program and includes numerous state and local partners.